B1

RCRA LAND DISPOSAL RESTRICTION INSPECTION

Facility: Johnson Controls Inc.

U.S. EPA I.D. No.: IND 009 549 593

Street: 1302 East Monroe St.

City: Goshen State: In. Zip Code: _____

Telephone: 219/533-2111

Operator: Same

Street: _____

City: _____ State: _____ Zip Code: _____

Telephone: _____

Owner: _____

Street: _____

City: _____ State: _____ Zip Code: _____

Telephone: _____

Inspection Date: 3/22/89 Time: 9:05 - AM Weather Conditions: Clear, 50°F

Inspectors:	Name	Affiliation	Telephone
	Ted Warner	IDEM	317/232-4536

Facility Representatives: _____

_____

	RCRA Status	F-Solvent	LDR Status California List	First Third
Generator	✓	✓		✓
Transporter				
Treater	✓	✓		✓
Storer				
Disposer				

Revised 9-26-88

RCRA LAND DISPOSAL RESTRICTION INSPECTION

APPLICABILITY CHECKLIST

Does the facility handle the following wastes?

		Gen.	Treat	Store	Disp.	Trans.
A.	**F-Solvent Wastes**					
1.	F001	✓	___	✓	___	___
2.	F002	✓	___	✓	___	___
3.	F003	___	___	___	___	___
4.	F004	___	___	___	___	___
5.	F005	✓	___	✓	___	___

Note: Use Appendix A to determine whether the facility is misclassifying any of its wastes.

B. **California List Wastes**

1. Liquid hazardous waste (including free liquids associated with any solid or sludge) that contains the following metals at concentrations greater than or equal to those specified N/A

		Gen.	Treat	Store	Disp.	Trans.
Arsenic	500 mg/L	___	___	___	___	___
Cadmium	100 mg/L	___	___	___	___	___
Chromium VI	500 mg/L	___	___	___	___	___
Lead	500 mg/L	___	___	___	___	___
Mercury	20 mg/L	___	___	___	___	___
Nickel	134 mg/L	___	___	___	___	___
Selenium	100 mg/L	___	___	___	___	___
Thallium	130 mg/L	___	___	___	___	___

2. Liquid hazardous waste (including free liquids associated with any solid or sludge) that contains free cyanides at concentrations greater than or equal to 1,000 mg/L

Gen.	Treat	Store	Disp.	Trans.
____	____	____	____	____

3. Liquid hazardous waste that has a pH of less than or equal to 2.0

____	____	____	____	____

4. Liquid hazardous waste that contains PCBs at concentrations greater than or equal to

50 ppm	____	____	____	____	____
500 ppm	____	____	____	____	____

Does the facility mix liquid hazardous waste that contains PCBs with other types of wastes?

____ Yes ____ No ____ NA

If yes, state reasons for mixing:

_____

_____

5. Hazardous waste that contains HOCs greater than or equal to 1,000 mg/L (liquids) or 1,000 mg/kg (solids)

____	____	____	____	____

Note (1): The prohibitions of 268.32(a)(3) and (e) do not apply if the waste is also subject to the solvent restrictions of 268 Subpart C for a specific HOC.

Note (2): The effective date of regulation for liquid wastes with HOCs greater than or equal to 1,000 mg/L and less than 10,000 mg/L was July 8, 1987; the effective date for liquid wastes containing HOCs greater than or equal to 10,000 mg/L and solid wastes containing HOCs greater than 1,000 mg/kg is November 8, 1988.

C. First Third Wastes

Note: (1) The detailed description for waste codes are listed in Appendix C.
(2) EPA has promulgated the treatment standards for the following waste code with *.

	Gen.	Treat	Store	Disp.	Trans.
F006*	✓		✓		
F007					
F008					
F009					
F019					
K001*					
K004*					
K008*					
K011					
K013					
K014					
K015*					
K016*					
K017					
K018*					
K019*					
K020*					
K021*					
K022*					
K024*					
K025*					
K030*					
K031					
K035					
K036*					
K037*					
K044*					
K045*					
K046*					

	Gen.	Treat	Store	Disp.	APP Trans.
K047*					
K048*					
K049*					
K050*					
K051*					
K052*					
K060*					
K061*					
K062*					
K069*					
K071*					
K073*					
K083*					
K084					
K085					
K086*					
K087*					
K099*					
K100*					
K101*					
K102*					
K103*					
K104*					
K106*					
P001					
P004					
P005					
P010					
P011					
P012					
P015					
P016					
P018					

APP

	Gen.	Treat	Store	Disp.	Trans.
P020	____	____	____	____	____
P030	____	____	____	____	____
P036	____	____	____	____	____
P037	____	____	____	____	____
P039	____	____	____	____	____
P041	____	____	____	____	____
P048	____	____	____	____	____
P050	____	____	____	____	____
P058	____	____	____	____	____
P059	____	____	____	____	____
P063	____	____	____	____	____
P068	____	____	____	____	____
P069	____	____	____	____	____
P070	____	____	____	____	____
P071	____	____	____	____	____
P081	____	____	____	____	____
P082	____	____	____	____	____
P084	____	____	____	____	____
P087	____	____	____	____	____
P089	____	____	____	____	____
P092	____	____	____	____	____
P094	____	____	____	____	____
P097	____	____	____	____	____
P102	____	____	____	____	____
P105	____	____	____	____	____
P108	____	____	____	____	____
P110	____	____	____	____	____
P115	____	____	____	____	____
P120	____	____	____	____	____
P122	____	____	____	____	____
P123	____	____	____	____	____
U007	____	____	____	____	____
U009	____	____	____	____	____

APP

	Gen.	Treat	Store	Disp.	Trans.
U010	____	____	____	____	____
U012	____	____	____	____	____
U016	____	____	____	____	____
U018	____	____	____	____	____
U019	____	____	____	____	____
U022	____	____	____	____	____
U029	____	____	____	____	____
U031	____	____	____	____	____
U036	____	____	____	____	____
U037	____	____	____	____	____
U041	____	____	____	____	____
U043	____	____	____	____	____
U044	____	____	____	____	____
U046	____	____	____	____	____
U050	____	____	____	____	____
U051	____	____	____	____	____
U053	____	____	____	____	____
U061	____	____	____	____	____
U063	____	____	____	____	____
U064	____	____	____	____	____
U066	____	____	____	____	____
U067	____	____	____	____	____
U074	____	____	____	____	____
U077	____	____	____	____	____
U078	____	____	____	____	____
U086	____	____	____	____	____
U089	____	____	____	____	____
U103	____	____	____	____	____
U105	____	____	____	____	____
U108	____	____	____	____	____
U115	____	____	____	____	____
U122	____	____	____	____	____
U124	____	____	____	____	____

	Gen.	Treat	Store	Disp.	APP Trans.
U129	____	____	____	____	____
U130	____	____	____	____	____
U133	____	____	____	____	____
U134	____	____	____	____	____
U137	____	____	____	____	____
U151	____	____	____	____	____
U154	____	____	____	____	____
U155	____	____	____	____	____
U157	____	____	____	____	____
U158	____	____	____	____	____
U159	____	____	____	____	____
U171	____	____	____	____	____
U177	____	____	____	____	____
U180	____	____	____	____	____
U185	____	____	____	____	____
U188	____	____	____	____	____
U192	____	____	____	____	____
U200	____	____	____	____	____
U209	____	____	____	____	____
U210	____	____	____	____	____
U211	____	____	____	____	____
U219	____	____	____	____	____
U220	____	____	____	____	____
U221	____	____	____	____	____
U223	____	____	____	____	____
U226	____	____	____	____	____
U227	____	____	____	____	____
U228	____	____	____	____	____
U237	____	____	____	____	____
U238	____	____	____	____	____
U248	____	____	____	____	____
U249	____	____	____	____	____

J.C.I.

RCRA LAND DISPOSAL RESTRICTION INSPECTION

GENERATOR CHECKLIST

GENERATOR REQUIREMENTS

A. <u>BDAT Treatability Group - Treatment Standards Identification</u>

1. F-Solvent Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

   ✓ Yes ____ No ____ NA

   If yes, check the appropriate treatability group.

   ____ Wastewaters containing solvents (less than or equal to 1% TOC by weight)
   ____ Pharmaceutical wastewater containing spent methylene chloride
   ✓ All other spent solvent wastes

2. California List Wastes: Does the generator correctly determine the appropriate treatment standard of the waste?

   a. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 50 but less 500 ppm, is the treatment in accordance with existing TSCA thermal treatment regulations for burning in high efficiency boilers (40 CFR 761.60) or incineration (40 CFR 761.70)?

      ____ Yes ____ No ✓ NA

      If yes, specify the method: _____

   b. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 500 ppm, is the waste incinerated or disposed of by other approved alternate methods (40 CFR 761. 60 (e))?

      ____ Yes ____ No ✓ NA

      If yes, specify the method and state whether the facility has submitted a written request to the Regional Administrator or Assistant Administrator for an exemption from the incineration requirement:

      _____
      _____
      _____

3. First Third Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

✓ Yes ____ No ____ NA

If yes, check the appropriate treatability group.

____ Wastewater (less than 1% TOC by weight and less than 1% filterable solids)
✓ Nonwastewaters

List the waste code and check the correct treatment standard group.

Waste Code	Wastewater	Nonwastewater
F006		✓

B. Waste Analysis

1. F-Solvent Wastes

a. Does the generator determine whether the F-solvent waste exceeds treatment standards?

✓ Yes ____ No ____ NA

How was this determination made?

- Knowledge of waste

✓ Yes ____ No

If yes, is any supporting data available for review? Describe how this is adequate.____

- TCLP

✓ Yes ____ No

If yes, provide the date of last test, the frequency of testing, and note any problems. Attach test results.
Sept. 1988 and every 60 days

b. Does the F-solvent waste exceed applicable treatability group treatment standards upon generation [268.7(a)(2)]?

✓ Yes ___ No ___ NA

If yes, specify the waste stream: Paint and degreasing waste

c. Does the generator dilute the F-solvent waste as a substitute for adequate treatment [268.3]?

___ Yes ___ No ✓ NA

d. How does the generator test F-solvent waste when a process or waste stream changes?

N/A

2. California List Wastes

a. Does the generator determine whether the waste is a liquid according to the Paint Filter Liquids Test (PFLT method 9095) as described by SW-846?

___ Yes ___ No ✓ NA

b. If the waste is determined to be a liquid according to PFLT, is an absorbent added to the waste?

___ Yes ___ No ✓ NA

What type of absorbent is used? _____

Check the types of waste to which absorbent is added.

___ Liquid hazardous waste having a pH less than or equal to 2

___ Liquid hazardous waste containing metals

___ Liquid hazardous waste containing free cyanides

c. Does the generator determine whether the concentration levels (not extract or filtrate) in the waste equal or exceed the prohibition levels or whether the waste has a pH of less than or equal to 2.0 based on:

- Knowledge of wastes

___ Yes ___ No ✓ NA

If yes, is any supporting data available for review? Describe how this is adequate._____

- Testing

____ Yes ____ No ✓ NA

If yes, list test method used: _____

d. Does the generator determine if concentration levels in the PFLT filtrate exceed cyanide and metals concentration levels?

____ Yes ____ No ✓ NA

- If yes, list test method used and constituent and concentration levels that exceeded prohibition levels: _____

e. Does the generator dilute the waste as a substitute for adequate treatment [268.3]?

____ Yes ____ No ✓ NA

3. First Third Wastes:

a. Does the generator correctly determine the appropriate treatment standard of the waste?

✓ Yes ____ No ____ NA

Note: The treatment standards for first third wastes are given in Appendix D.

b. Does the generator determine whether the First Third waste exceeds treatment standards upon generation?

✓ Yes ____ No ____ Soft hammer

If yes, specify the waste stream: F006

How was this determination made?

- Knowledge of waste

✓ Yes ____ No

If yes, is any supporting data available for review? Describe how this is adequate._____

- TCLP

✓ Yes ____ No ____ NA

- Total Constituent Analysis

____ Yes ____ No ____ NA

Provide the date of last test, the frequency of testing, and note any problems. Attach test results.

Sept. 1988

c. Does the generator dilute the waste as a substitute for adequate treatment [268.3]?

____ Yes ____ No ✓ NA

d. How does the generator test the waste when a process or waste stream changes?

N/A

C. Management

1. On-Site Management

Is restrict waste or waste that exceeds the treatment standards treated, stored, or disposed on-site?

✓ Yes ____ No Stored in contain

If yes, the TSD Checklist must be completed.

2. Off-Site Management

a. Does the generator ship any waste that exceeds the treatment standards to an off-site treatment or storage facility?

✓ Yes ____ No Treatment

b. Does the generator provide notification to the treatment or storage facility [268.7(a)(1)]?

✓ Yes ____ No

c. Does notification contain the following?

EPA Hazardous waste number(s)	✓ Yes	____ No
Applicable treatment standards	✓ Yes	____ No
Manifest number	✓ Yes	____ No
Waste analysis data, if available	✓ Yes	____ No

Identify off-site treatment or storage facilities: Great Lakes Environmental, Warren Mich.

d. Does the generator ship any waste that meets the treatment standards to an off-site disposal facility?

____ Yes ____ ✓ No

e. Does the generator provide notification and certification to the disposal facility [268.7(a)(2)]?

____ Yes ____ No

f. Does notification contain the following?

EPA Hazardous waste number(s)	____ Yes	____ No
Applicable treatment standards	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Certification that the waste meets treatment standards	____ Yes	____ No

Identify off-site land disposal facilities: _____

_____

_____

g. Is the waste subject to a nationwide variance, case by case extension (268.5), or petition (268.6)?

____ Yes ____ No ____ ✓ NA

h. If yes, does the generator provide notification to the off-site receiving facility that the waste is not prohibited from land disposal [268.7(a)(3)]?

____ Yes ____ No

i. If yes, does the notification contain the following information?

EPA Hazardous waste number	____ Yes	____ No
The corresponding treatment standards and all applicable prohibitions	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Date the waste is subject to the prohibitions	____ Yes	____ No

j. Does the generator retain copies of all notices and certifications for a period of 5 years?

____ Yes ____ No

D. <u>Demonstration and Certification -- "Soft Hammer" Wastes</u> N/A

a. Has the generator attempted to locate and contract with treatment and recovery facilities that provide treatment that yields the greatest environmental benefit [268.8(a)(1)]?

____ Yes ____ No

b. Has the generator submitted to the Regional Adminstration a demonstration and certification containing the following information to document its efforts to locate practically available treatment:

A list of facilities and facility officials contacted?	____ Yes	____ No
Addresses	____ Yes	____ No
Telephone Numbers	____ Yes	____ No
Contact dates	____ Yes	____ No

Attach a copy of the demonstration and certification

c. If the generator has determined that there is no practically available treatment for its wastes, has it sent documentation to EPA demonstrating why it was not able to obtain treatment or recovery for the waste?

____ Yes ____ No

If yes, attach a copy of written discussion.

d. Does the generator ship his waste off-site for treatment?

____ Yes ____ No

Describe the type of treatment and treatment facilities _____

e. Did the generator send a copy of its demonstration and certification to the receiving facility with the first shipment of waste?

____ Yes ____ No

f. Does the generator provide certification with each subsequent shipment of wastes?

____ Yes ____ No

g. Does the generator provide the following notification to the receiving facility with each shipment of waste?

(i) EPA Hazardous waste number ____ Yes ____ No

(ii) Manifest number ____ Yes ____ No

(iii) Waste analysis data, if available ____ Yes ____ No

h. Does the generator retain copies of all notices, demonstrations, and certifications for a period of 5 years?

____ Yes ____ No

E. <u>Treatment Using RCRA 264/265 Exempt Units or Processes</u>
(i.e., boilers, furnaces, distillation units, wastewater treatment tanks, elementary neutralization, etc.)

Are treatment residuals generated from units or processes exempt under RCRA 264/265?

____ Yes ____ No

If yes, list types of waste treatment units and processes:

J. C. I.

RCRA LAND DISPOSAL RESTRICTION INSPECTION

TSD CHECKLIST

TSD REQUIREMENTS

A. General Facility Standards

1. Does the waste analysis plan cover Part 268 requirements [264.13 or 265.13]?

o F-solvent	✓ Yes	___ No	___ NA
o California List	___ Yes	___ No	___ NA
o First Third	✓ Yes	___ No	___ NA

2. Does the facility obtain representative chemical and physical analyses of wastes and residues?

✓ Yes ___ No

a. What date was the waste analysis plan last revised? 7/26/1988

b. Are analyses conducted on-site or off-site?

___ On-site ✓ Off-site

Identify off-site lab: Great Lakes Environmental, Warren, Mich.

c. Is F-solvent waste analyzed using TCLP?

✓ Yes ___ No ___ NA

d. Is First Third waste analyzed using the analytical method that is appropriate for the objective of the specified BDAT (i.e., total constituent analysis for destruction technologies and TCLP for stabilization/fixation technologies)?

✓ Yes ___ No ___ NA

Note: The appropriate analytical methods (TCLP or total constituent) for first third wastes with specified treatment standards are given in Appendix D.

e. Describe the frequency of sampling: every 60 days

3. Are the operating records, including analyses and quantities, complete [264.73/265.73]?

✓ Yes ____ No

B. Storage (268.50)

1. Are restricted wastes stored on-site?

✓ Yes ____ No

If no, go to C, Treatment.

2. If yes, check the appropriate method.

____ Tanks
✓ Containers

3. Are all containers clearly marked to identify the contents and date(s) entering storage?

✓ Yes ____ No ____ NA

4. Do operating records track the location, quantity of the wastes, and dates that the wastes enter and leave storage?

✓ Yes ____ No

5. Do operating records agree with container labeling?

✓ Yes ____ No ____ NA

6. Do operating records contain copies of the notice, certification, and demonstration (if applicable) from the generator for the past 5 years?

✓ Yes ____ No

7. Have wastes been stored for more than 1 year since the applicable LDR regulations went into effect?

____ Yes ____ No ✓ NA

If yes, can the facility show that such accumulation is necessary to facilitate proper recovery, treatment, or disposal?

____ Yes ____ No

If yes, state how: _____

_____

_____

8. Have tanks been emptied at least once per year since the applicable LDR regulations went into effect? N/A

____ Yes ____ No ____ NA

If yes, do the operating records show that the volume of waste removed from tanks annually equals or is more than the tank volume?

____ Yes ____ No

9. Are all tanks clearly marked with a description of the contents, the quantity of wastes received, and date(s) entering storage, or is such information recorded and maintained in the operating record?

____ Yes ____ No ____ NA

_____

_____

_____

C. <u>Treatment</u>

1. Does the facility treat restricted wastes other than in surface impoundments?

____ Yes ✓ ____ No

If no, go to D, Treatment in Surface Impoundments.

2. Describe the treatment processes:

_____

_____

_____

3. Does the facility, in accordance with an acceptable waste analysis plan, determine whether the residue or residue extract (for treatment standards expressed as concentrations in the waste extract) from all treatment processes is less than treatment standards [268.7(b)]?

_____ Yes _____ No

4. Is dilution used as a substitute for treatment?

_____ Yes _____ No

6. Are notifications, demonstration, and certification (if applicable) prepared by the generators kept in the facility's operating record?

_____ Yes _____ No

7. Does the facility ship any waste or treatment residue that meets the treatment standards to an off-site disposal facility?

_____ Yes _____ No _____ NA

If yes, does the treatment facility provide notification and certification to the disposal facility?

_____ Yes _____ No

If yes, does notification contain the following?

EPA Hazardous waste number(s)	_____ Yes	_____ No
Applicable treatment standards	_____ Yes	_____ No
Manifest number	_____ Yes	_____ No
Waste analysis data, if available	_____ Yes	_____ No
Certification that the waste meets the treatment standards	_____ Yes	_____ No

Identify off-site disposal facilities: _____

_____

_____

8. Does the facility ship any "soft hammer" waste to an off-site disposal facility?

____ Yes ____ No ____ NA

If yes, does the treatment facility send a copy of the generator's demonstration (if applicable) and certification to the disposal facility?

____ Yes ____ No

D. Treatment in Surface Impoundments

1. Are restricted wastes placed in surface impoundments for treatment?

____ Yes ____ No

If no, go to E, Land Disposal.

2. If yes, did the facility submit to the Agency the waste analysis plan and certification of compliance with minimum technology and ground-water monitoring requirements?

____ Yes ____ No

3. If the minimum technology requirements have not been met, has a waiver been granted for that unit?

____ Yes ____ No ____ NA

4. Are representative samples of the sludge and supernatant from the surface impoundment tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan?

____ Yes ____ No

Attach test results.

5. Do the hazardous waste residues (sludges or liquids) exceed the treatment standards specified in 268.41, or where no treatment standards are established for a waste, the applicable prohibition levels?

____ Yes ____ No

6. Provide the frequency of analyses conducted on treatment residues: _____

_____

_____

7. Does the operating record adequately document the results of waste analyses performed in accordance with 268.41?

_____ Yes _____ No

8. Do the hazardous waste residues exceed the treatment standards (268.41) or do not meet the prohibition levels?

Sludge _____ Yes _____ No

Supernatant _____ Yes _____ No

a. If yes, are sludge and supernatant removed adequately on an annual basis?

_____ Yes _____ No

b. Are adequate precautions taken to protect liners, and do records indicate that liner integrity is inspected?

_____ Yes _____ No

c. Are residues subsequently managed in another surface impoundment?

_____ Yes _____ No

d. Are residues treated prior to disposal?

_____ Yes _____ No

If yes, are waste residues treated on-site or off-site?

_____ On-site _____ Off-site

Identify treatment method: _____

_____

_____

E. Land Disposal

1. Are restricted wastes placed in land disposal units such as landfills, surface impoundments, waste piles, wells, land treatment units, salt domes/beds, mines/caves, or concrete vault or bunker?

   ____ Yes ____ No

   Note: Do not include surface impoundments addressed in D, Treatment in Surface Impoundments.

   If yes, specify which units and what wastes each unit has received: _____

2. Are these wastes disposed of in a new, replacement, or laterally expanded landfill or impoundment that meets the minimum technology requirements (double liner and leachate collection) and groundwater monitoring?

   ____ Yes ____ No

3. Does the facility operating record have notices, certifications, and demonstration (if applicable) from generators/storer/treaters for 5 years [268.7(c); 268.7(a),(b)]?

   ____ Yes ____ No

4. Does the facility obtain waste analysis data or test the wastes (according to the waste analysis plan) to determine that the wastes comply with the applicable treatment standards [268.7(c)]?

   ____ Yes ____ No

   If yes, at what frequency? _____

5. If restricted wastes that meet the treatment standards are placed in land disposal units (excluding national capacity variances) [268.30(a)], does facility have an approved waiver based on no migration petition [268.6], an approved case-by-case capacity extension [268.5], or variance [268.44]?

   ____ Yes ____ No

6. Does the facility dispose of restricted wastes that are subject to a national capacity variance?

   ____ Yes ____ No

7. Does the facility have notices [268.7(a)(3)] and records of disposal for disposed wastes that are subject to a national capacity variance, case-by-case extensions [268.5], or no migration petitions [268.6]?

____ Yes ____ No ____ NA

8. What is the volume of the restricted wastes disposed of to date?

_____

_____

9. If the facility has a case-by-case extension, is the facility making progress as described in progress reports?

____ Yes ____ No ____ NA